Strategies to Communicate with Vaccine Hesitant Parents

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Vaccines Are Good ☺
Disease is Bad ☹

- **Vaccines protect children from 16 serious diseases**

- **Toddler immunization rates are high**
  - NIS 2015 19-35 months combined series*
    - U.S. 72.2%
    - MT 68.1%

- **Percentage of parents refusing ALL vaccine is small (1-3%)**

And yet . . .

MMWR. National, Regional, State, and Selected Local Area Vaccination Coverage Among Adolescents Aged 13–17 Years — United States, 2015
65(33);850–858 2016

Have your opinions on vaccinations changed since you became a parent?

Vaccine Hesitancy

- **In 8 managed health care systems the percentage of under-vaccinated children 2 years of age and younger has increased***
  - 2004 – 42%
  - 2008 – 54%
- **Increased frequency of requests to "spread out" the immunization series or refusal of specific vaccines reported by health care professionals**

*Glanz et al, JAMA Pediatr 2013

"Costs" of Vaccine Hesitancy

- **Increased pain/trauma for children from multiple visits**
  - 84% of pediatricians think it is more painful for children to administer vaccines over multiple visits than to give them simultaneously
- **Less time on other preventative care**
  - Average visit = 18 minutes
- **Physician burn-out**
  - 50% of pediatricians report their job is less satisfying because of having to talk about vaccines with hesitant parents
- **Increasing number of children are under-vaccinated**
  - Under-vaccinated tend to remain under-vaccinated

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Vaccine-hesitancy and Health Care Providers

- **Recent survey among pediatricians nationally**
  - 46% agreed that their job was less satisfying because of the need to discuss vaccines with vaccine-hesitant parents
  - 60% reported spending more than 10 minutes discussing vaccines in visits with vaccine-hesitant parents
- **When talking to parents about vaccines, we want to be effective but also efficient**

Kempe. A et al. Physician Response to Parental Requests to Spread Out the Recommended Vaccine Schedule. Pediatrics April 2015 Volume 135 Issue 4

RESEARCH

The Cochran Collaboration

- Face-to-face interventions for informing or educating parents about early childhood vaccination (Review)

Cochrane Collaboration, 2013

- “The limited evidence available is low quality and suggests that face to face interventions to inform or educate parents about childhood vaccination have little to no impact on immunisation status, or knowledge or understanding of vaccination.”

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Effective Messages in Vaccine Promotion: A Randomized Trial

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KEY WORDS

vaccines, myths, MMR, autism, false, misperceptions, misinformation

ABBREVIATIONS

aOR—adjusted odds ratio

WHAT'S KNOWN ON THIS SUBJECT: Maintaining high levels of measles-mumps-rubella immunization is an important public health priority that has been threatened by discredited claims about the safety of the vaccine. Relatively little is known about what messages are effective in overcoming parental reluctance to vaccinate.

WHAT THIS STUDY ADDS: Pro-vaccine messages do not always work as intended. The effectiveness of those messages may vary depending on existing parental attitudes toward vaccines. For some parents, they may actually increase misperceptions or reduce vaccination intention.

Effective Messaging?

- **Parents randomly assigned to receive 1 of 4 interventions:**
  - Info explaining lack of evidence that MMR causes autism from CDC
  - Info about measles, mumps, rubella from VIS
  - Images of children with measles, mumps, rubella
  - A dramatic narrative about severe case of measles; or to a control group
- **None of the interventions increased parental intent to vaccinate a future child**
- **Refuting claims of an MMR/autism link successfully reduced misperceptions that vaccines cause autism but decreased intent to vaccinate among parents who had the least favorable vaccine attitudes.**
- **Images of sick children increased expressed belief in a vaccine/autism link**
- **Dramatic narrative about an infant in danger increased self-reported belief in serious vaccine side effects**

Physician Communication Training and Parental Vaccine Hesitancy: A Randomized Trial

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abstract

BACKGROUND AND OBJECTIVES: Physicians have a major influence on parental vaccine decisior

Communicating with Parents and Patients About Vaccines

- There is much research on parents' knowledge, attitudes, beliefs
- Little research on what communication techniques actually *change parents' behavior*
- Research in this area is complicated
- We've been focused on the 'what' more than the 'how'

Conventional Wisdom

- Improve parents' knowledge and they will make the right decision
- This educational approach assumes human decision making is rational (which it clearly is not)
- Behavioral economics: human behavior is influenced by deep-seated cognitive biases and heuristics resistant to rational influence

What Does This Mean?

- Becoming increasingly clear that simply correcting parents' knowledge gaps – whether through informational brochures, community campaigns, or direct provider conversations – is often not enough to address parents who have concerns about vaccines

- Investigators are now focusing on developing interventions to improve vaccination uptake focused on how people actually think rather than how they ought to think

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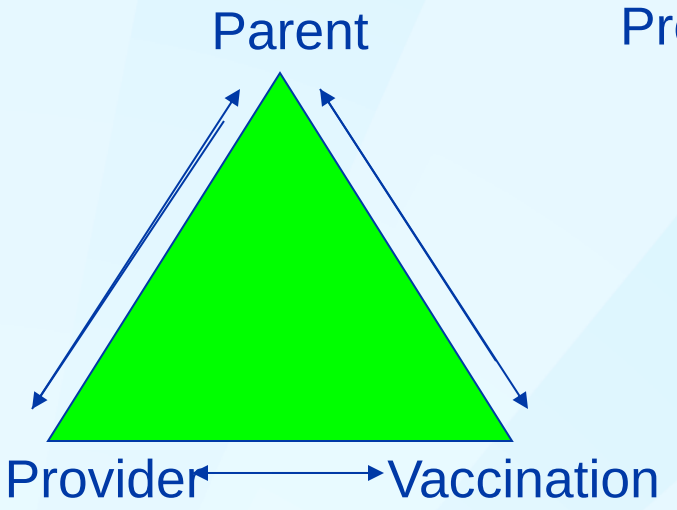
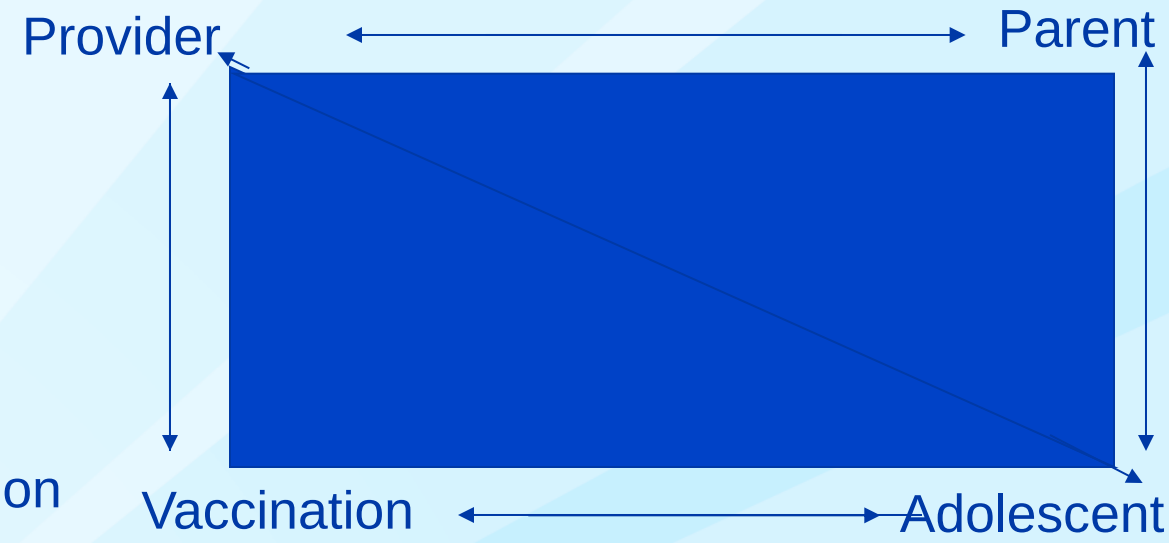
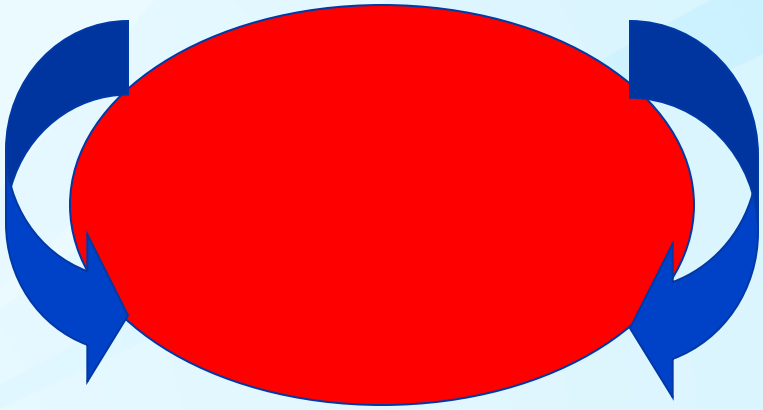
Each Encounter Takes its Own Shape







Sometimes it can feel like going around in circles!

COMMUNICATION STRATEGIES

What You Say Matters, How You Say it Matters More

- Providers are a patient's most trusted source of information on vaccines
- Based on research conducted with parents and physicians show that a patient who receives a strong recommendation from a provider is 4–5 times more likely to be vaccinated*
- "Bundle" all needed vaccines into one, strong recommendation

*2007 National Survey of Children's Health. Factors associated with human papillomavirus vaccine-series initiation and health care provider recommendation in U.S. adolescent females: *Vaccine*.2012 30(20):3112-3118

Can Social Norms Influence Decision Making?

- Researchers looked at messaging and how it could effect towel reuse in hotels

Goldstein, Noah J. et al. J Consum Res 2008;35:472-482

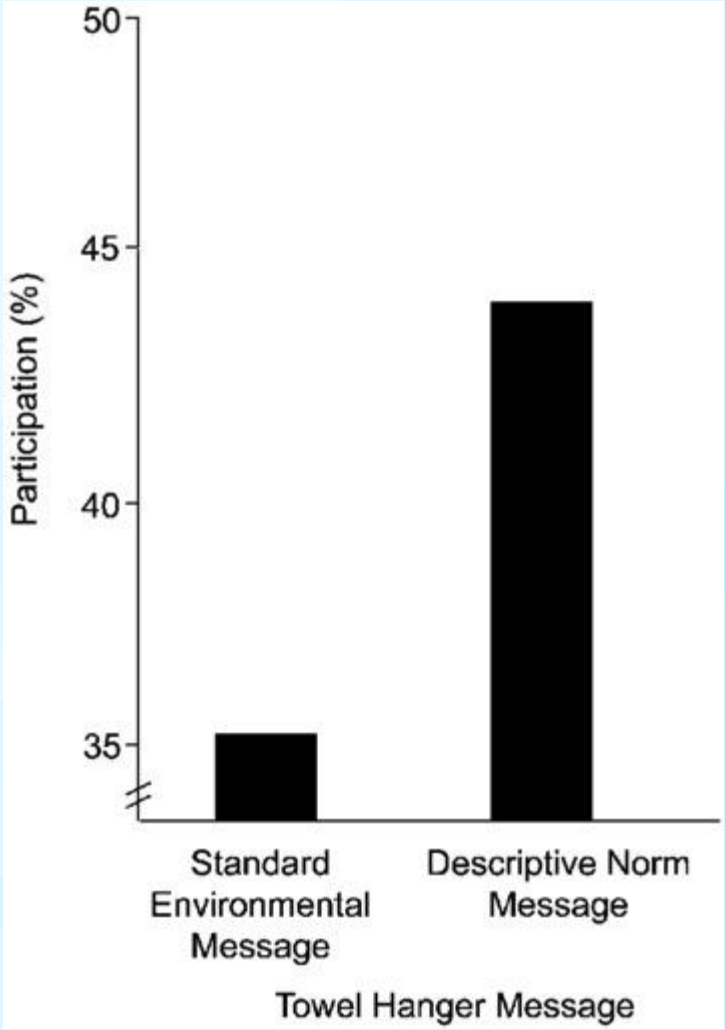
Example of Towel Reuse Sign

- **“HELP SAVE THE ENVIRONMENT. You can show your respect for nature and help save the environment by reusing your towels during your stay.”**

OR

- **“JOIN YOUR FELLOW GUESTS IN HELPING TO SAVE THE ENVIRONMENT. Almost 75% of guests who are asked to participate in our new resource savings program do help by using their towels more than once. You can join your fellow guests in this program to help save the environment by reusing your towels during your stay.”**

Towel Reuse Rates as a Function of Sign in Room



Goldstein, Noah J. et al. J Consum Res 2008;35:472-482

Could Social Norms Influence a Decision to Vaccinate?

- Increasing attention to this as a strategy
- Fits with the 'presumptive' recommendation
- Study from 1990's suggested university students were more likely to receive influenza vaccine if they were told most students got one

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Another Study …

- **Investigators in Seattle videotaped well-child visit encounters for children 1–19 months of age**
- **Taped 111 vaccine discussions**
  - 50% with vaccine-hesitant parents
- **Goal: determine what predicated the uptake of vaccines**

Opel, Douglas J. et al. The Architecture of Provider-Parent Vaccine Discussion at health Supervision Visits. *Pediatrics* 2013:132:1037

What Did They Find?

- **How the conversation is started matters**
- **The best predictor of vaccination was how the provider started the conversation**
  - For both vaccine-hesitant and no-hesitant parents
- **Participatory: Provides parents with more decision making latitude**
  - “Have you thought about what shots you’d like to get today?”
- **Presumptive: Presupposes that parents will get shots**
  - “Well, we have some shots to do today”

Opel, Douglas J. et al. The Architecture of Provider-Parent Vaccine Discussion at health Supervision Visits. Pediatrics 2013:132:1037

Participatory versus Presumptive

- **“Among all parents, a larger proportion resisted vaccine recommendations when providers used a participatory rather than presumptive initiation format (83% vs 26%; P < .001).”**
  - “This finding remained true among vaccine-hesitant parents (89% vs 30%; P < .001).”

Opel, Douglas J. et al. The Architecture of Provider-Parent Vaccine Discussion at health Supervision Visits. Pediatrics 2013:132:1037

Why Presumptive Style Might Be Better

- Most parents perceive decisions about vaccination to be complicated
- As humans, when we make decisions we perceived to be complicated, we tend to have a status quo bias (also called a default bias), meaning we go with what is expected or ‘normal’
- By assuming a presumptive tone, parents are made to feel that getting the vaccine is what most people do, that it is the socially acceptable ‘norm,’ and are therefore less likely to resist

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Encountering a Vaccine-Hesitant Parent

- The provider might ask the parent why she does not want the vaccine
- In this case the parent will begin to argue for all the reasons she does not want her child to be vaccinated. In the process, the parent strengthens her resolve against the vaccination.
- The provider is now left open to falling into additional conversation traps.

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Communication Traps

- **Persuasion Trap**
  - When the provider becomes the champion for the vaccine and tries to convince the hesitant or resistant parent of the benefits. This usually ends up in an argumentative type of "yes, but" cycle
- **Data Trap**
  - The provider gives all the data about some aspect of the vaccine. This often ends up putting people off and raising resistance because it implies that they don't know the full story and you're going to give it to them
  - Also, it can be counter-productive because you end up raising concerns that the patient had not previously considered
- **Q and A Trap**
  - The provider begins asking a series of closed questions that require a yes or no answer and does not invite any insight.

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Summary

- Directive patient/provider recommendations followed by a closed-question work fine for the patient who is ready to be vaccinated or for the patient who expects the doctor to tell him or her what to do

- For patients who are unsure or resistant, a closed-ended question following a recommendation can lead to less productive conversations

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Communication Style: Motivational Interviewing

- Motivational interviewing is a patient-centered, guiding communication style for enhancing a person's own motivation for change or behavioral activation
- Motivational Interviewing has not been tested and proven effective for convincing parents who are hesitant about vaccination
- HOWEVER, it has been shown to be effective in other health interventions, and the principles that make it effective make sense for vaccine conversations

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Using Motivational Interviewing Techniques for Difficult Vaccine Discussions

- For patients who are unsure or resistant, a closed-ended question following a recommendation can lead to less productive conversations
- Motivational interviewing (MI) is a patient-centered, guiding communication style for enhancing a person's own motivation for change or behavioral activation
- MI includes:
  - Open-ended Questions
  - Affirmations
  - Reflection
  - Summary

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Motivational Interview and Vaccine Conversations

- **The provider asks in a non-threatening way to share the parent's concerns**

- **Example:**
  - A mother expresses concerns about the number of vaccines (5) her 1-year old daughter needs. She wonders if they could be spread out.
  - HCP to mother: You seem to have concerns about the number of injections. Well, that's perfectly understandable. Would you mind sharing what your particular concerns are?"
  - Mother's response: "Well, I am worried about how much it is going to hurt. 5 injections at once seems like too many."

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Motivational Interview and Vaccine Conversations

- **The provider reflects back what the patient is saying to be sure he/she understands (empathy) and summarizes what has been heard before proceeding, again with permission, to make a recommendation.**

- **Example:**
  - HCP to mother: “So I can hear that you’re concerned that 5 injections will be too painful and it will hurt less if we spread them out. Well, I completely get that – 5 does seem like a lot and she is only a year. I’ve thought a lot about this. Is it okay if I go over how I’ve come to think about this vaccine?”

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Motivational Interview and Vaccine Conversation

- **Now make a clear personalized recommendation**
- **Example:**
  - "I realize that injections hurt and that is why I have learned ways to make vaccine injections hurt less. And research studies have shown that spreading shots over many visits actually hurts more. And we know have a combination vaccine that includes 3 of these vaccines so she only needs 3 injections."
- **Put the concern into a perspective the family can relate to, if possible**

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Motivational Interview and Vaccine Conversations

- **End the conversation with an open ended question**
- **Example**
  - If she were my daughter I would not hesitate to give all these recommend vaccines, and most of my parents find that getting all the vaccines at the same time means the baby has only one bad day versus many bad days. Having said that, this is a decision that you can make. What do you think?”

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Motivational Interview

- **Engages the patient respectively and fully in the discussion**
- **The 4 elements include:**
  - Empathy
  - Collaboration
  - Evocation
  - Support for autonomy
- **Include behavior change principles – highlight social norms, preventing disease**
- **Includes a clear, strong, and personalized recommendation**

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Last But Not Least

- **Get everyone on the same page**
  - All staff – including front desk/support staff
- **Use talking points**

Talking to Parents about HPV Vaccine

Recommend HPV vaccination in the **same way** and on the **same day** as all adolescent vaccines. You can say, *"Now that your son is 11, he is due for vaccinations today to help protect him from meningitis, HPV cancers, and pertussis."* Remind parents of the follow-up shots their child will need and ask them to make appointments before they leave.

Why does my child need HPV vaccine?
HPV vaccine is important because it prevents infections that can cause cancer. That's why we need to start the shot series today.

Is my child really at risk for HPV?
HPV is a very common infection in women and men that can cause cancer. Starting the vaccine series today will help protect your child from the cancers and diseases caused by HPV.

Why do they need HPV vaccine at such a young age?
Like all vaccines, we want to give HPV vaccine earlier rather than later. If you wait, your child may need three shots instead of two.

I'm worried about the safety of HPV vaccine. Do you think it's safe?
Yes, HPV vaccination is very safe. Like any medication, vaccines can cause side effects, including pain, swelling, or redness where the shot was given. That's normal for HPV vaccine too and should go away in a day or two.

Sometimes kids faint after they get shots and they could be injured if they fall from fainting. We'll protect your child by having them stay seated after the shot.

Would you get HPV vaccine for your kids?
Yes, I gave HPV vaccine to my child (or grandchild, etc.) when he was 11, because it's important for preventing cancer.

Why do boys need HPV vaccine?
HPV vaccination can help prevent future infection that can lead to cancers of the penis, anus, and back of the throat in men.

What diseases are caused by HPV?
Some HPV infections can cause cancer—like cancer of the cervix or in the back of the throat—but we can protect your child from these cancers in the future by getting the first HPV shot today.

How do you know the vaccine works?
Studies continue to prove HPV vaccination works extremely well, decreasing the number of infections and HPV precancers in young people since it has been available.

I'm worried my child will think that getting this vaccine makes it OK to have sex.
Studies tell us that getting HPV vaccine doesn't make kids more likely to start having sex. I recommend we give your child her first HPV shot today.

Can HPV vaccine cause infertility in my child?
There is no known link between HPV vaccination and the inability to have children in the future. However, women who develop an HPV precancer or cancer could require treatment that would limit their ability to have children.

What vaccines are actually required?
I strongly recommend each of these vaccines and so do experts at the CDC and major medical organizations. School entry requirements are developed for public health and safety, but don't always reflect the most current medical recommendations for your child's health.

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

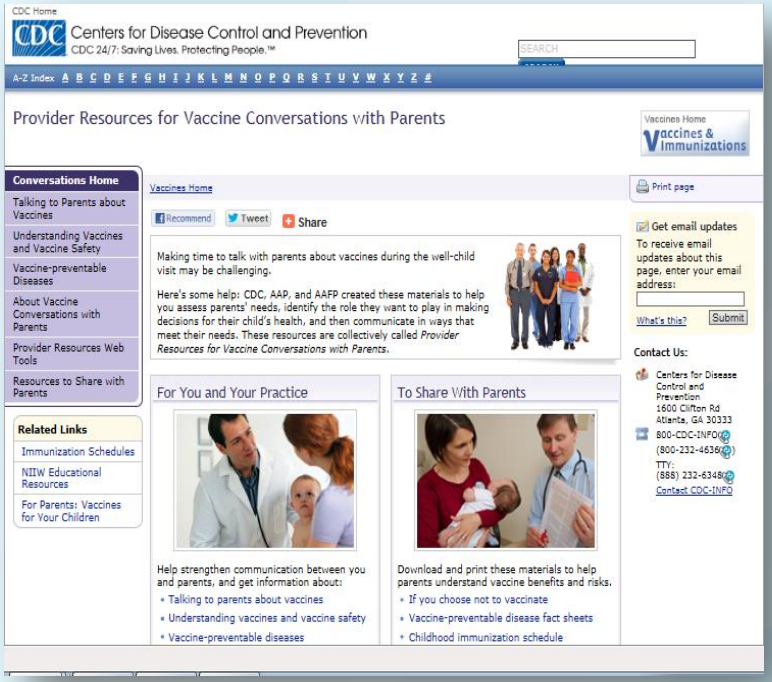
HPV VACCINE
IS CANCER PREVENTION

CDC. Talking to Parents about HPV Vaccine https://www.cdc.gov/vaccines/who/teens/for-hcp-tipsheet-hpv.pdf

Summary

- Presumptive style had far higher vaccine acceptance
- Get (and keep!) consistent vaccine messaging among staff
- Give a strong recommendation for vaccines
- Communicate using empathy, open-ended questions, affirmations and reflection

Vaccine Communication Resources



Provider Resources for Vaccine Conversations with Parents

www.cdc.gov/vaccines/hcp/patient-ed/conversations/

CHOP: Vaccine Education Center

http://vec.chop.edu/service/vaccine-education-center/home.html/

CDC Vaccines and Immunization Resources

- **Questions? Email CDC**
  - Providers — nipinfo@cdc.gov
  - Parents and patients — www.cdc.gov/cdcinfo
- **Website** — www.cdc.gov/vaccines
- **Influenza** — www.cdc.gov/flu
- **Vaccine Safety** — www.cdc.gov/vaccinesafety

Additional Resources

- **Montana Immunization Program**
  - http://dphhs.mt.gov/publichealth/Immunization
- **Immunization Action Coalition** **www.immunize.org**
- **Vaccine Education Center** **www.chop.edu**
- **American Academy of Pediatrics (AAP)** **www.aap.org/immunize**
- **National Foundation for Infectious Diseases (NFID)** **www.nfid.org**